

GenCore version 5.1.3  
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OM protein - nucleic search, using frame\_p2n model

Run on: January 16, 2003 16:55:57 ; Search time 1144.56 Seconds  
(without alignments)  
330,553 Million cell updates/sec

Title: US-09-856-070-19  
Perfect score: 65  
Sequence: 1 KEELMLRLQDYE 13

Scoring table: BLOSUM62  
Xgapop 10.0 Xgapext 0.5  
Ygapop 10.0 Ygapext 0.5  
Fgapop 6.0 Fgapext 7.0  
Deleop 6.0 Delext 7.0

Searched: 23:54:40 Sat, 14/12/03 78 res. dues

Total number of hits satisfying chosen parameters: 4169280

Minimum DB seq length: 0  
Maximum DB seq length: 20000000

Post processing: Minimum Match 64  
Maximum Match 1008

Listing first 45 summaries

Command line parameters:

```
-MODEL=frame+p2n, model = DEVEL-XIP
-Q=C9N2.1/USP0_spool/USU955607/runtat_14012003_155834_1621/app_query.fasta_1_1592
-DB=GenEmbl -QEMBL=fastap -SUFFIX=large -MINMATCH=0 -1 Long-1_01_LwPEXT_0
-UNITS=bills -START=1 -END=2 -MATRIX=biolog62 -TRANS=human40.cdi -LIST=45
-DOCAIGN=200 -THR SCORE=PCP -THR MAX=100 -THR MIN=0 -THR MODE=LOCAL
-GUIMMP=PRO -NORMAL=EXT -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=USU95607_01_MGN_1_155834_1621 -NCI0-6 -ICIG-3
-NO_XLPPXY -NO_MMAPP -LAIGE_SOURCES=0 -WALF -LNP1LNG -DFV -IMPROT -120
-WARN TIMEOUT=30 -THREARS=1 -XIA=0 -IP=0 -XIAPEXT=0.5 -FIAPEXP=6 -FIAPEXT=7
-YGAP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
```

Database : GenEmbl : \*

- 1: qb\_bp:\*
- 2: qb\_bp:\*
- 3: qb\_in:\*
- 4: qb\_on:\*
- 5: qb\_cv:\*
- 6: qb\_pat:\*
- 7: qb\_bp:\*
- 8: qb\_bp:\*
- 9: qb\_fp:\*
- 10: qb\_rcv:\*
- 11: qb\_sts:\*
- 12: qb\_sv:\*
- 13: qb\_bp:\*
- 14: qb\_vj:\*
- 15: em\_ba:\*
- 16: em\_furn:\*
- 17: em\_hum:\*
- 18: em\_in:\*
- 19: em\_mu:\*
- 20: em\_on:\*
- 21: em\_or:\*
- 22: em\_cv:\*
- 23: em\_pat:\*
- 24: em\_ph:\*
- 25: em\_pl:\*
- 26: em\_to:\*
- 27: em\_sts:\*
- 28: em\_un:\*

| SUMMARIES  |                |              |             |
|------------|----------------|--------------|-------------|
| Result No. | Query          | Match length | Description |
| 1          | em_vj:*        | 2514         | Bovine      |
| 2          | em_hqg_hum:*   | 2010         | HUMVILL2    |
| 3          | em_hqg_inv:*   | 1000         | AX411074    |
| 4          | em_hqg_other:* | 1000         | AX411074    |
| 5          | em_hqg_mus:*   | 1000         | HSURRIN     |
| 6          | em_ltr9_p11:*  | 1000         | AX440476    |
| 7          | em_hqg_rod:*   | 1000         | AX440476    |
| 8          | em_hqg_mam:*   | 1000         | AX440476    |
| 9          | em_hqg_vrt:*   | 1000         | AX440476    |
| 10         | em_sjy:*       | 1000         | HSURRIN     |
| 11         | em_hqg_hum:*   | 1000         | AL889931    |
| 12         | em_hqg_other:* | 1000         | AL889931    |
| 13         | em_hqg_mus:*   | 1000         | AL889931    |
| 14         | em_hqg_rod:*   | 1000         | AL889931    |
| 15         | em_hqg_mam:*   | 1000         | AL889931    |
| 16         | em_hqg_vrt:*   | 1000         | AL889931    |
| 17         | em_sjy:*       | 1000         | AL889931    |
| 18         | em_hqg_hum:*   | 1000         | AL889931    |
| 19         | em_hqg_inv:*   | 1000         | AL889931    |
| 20         | em_hqg_other:* | 1000         | AL889931    |
| 21         | em_hqg_mus:*   | 1000         | AL889931    |
| 22         | em_ltr9_p11:*  | 1000         | AL889931    |
| 23         | em_hqg_rod:*   | 1000         | AL889931    |
| 24         | em_hqg_mam:*   | 1000         | AL889931    |
| 25         | em_hqg_vrt:*   | 1000         | AL889931    |
| 26         | em_sjy:*       | 1000         | AL889931    |
| 27         | em_hqg_hum:*   | 1000         | AL889931    |
| 28         | em_hqg_other:* | 1000         | AL889931    |
| 29         | em_vj:*        | 1000         | HSURRIN     |
| 30         | em_hqg_hum:*   | 1000         | HSURRIN     |
| 31         | em_hqg_inv:*   | 1000         | HSURRIN     |
| 32         | em_hqg_other:* | 1000         | HSURRIN     |
| 33         | em_hqg_mus:*   | 1000         | HSURRIN     |
| 34         | em_ltr9_p11:*  | 1000         | HSURRIN     |
| 35         | em_hqg_rod:*   | 1000         | HSURRIN     |
| 36         | em_hqg_mam:*   | 1000         | HSURRIN     |
| 37         | em_hqg_vrt:*   | 1000         | HSURRIN     |
| 38         | em_sjy:*       | 1000         | HSURRIN     |
| 39         | em_hqg_hum:*   | 1000         | HSURRIN     |
| 40         | em_hqg_other:* | 1000         | HSURRIN     |
| 41         | em_hqg_mus:*   | 1000         | HSURRIN     |

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## ALIGNMENTS

## RESULT 1







where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap, as described above. In this sequence was finished as follows unless otherwise noted, all regions were either double stranded or sequenced with an alternative chemistry or recovered by high quality data (i.e., phred quality > 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone, and the assembly was confirmed by restriction digest. The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:

SWISSPROT: Tr; TREMBL: Wp; WORMPEP: Information on the WORMPEP database can be found at [http://www.sanger.ac.uk/Projects/c\\_elegans/WormPep](http://www.sanger.ac.uk/Projects/c_elegans/WormPep). This sequence was generated from part of bacterial clone contigs of human chromosome 6, constructed by the Sanger Centre Chromosome 6 Mapping Group. Further information can be found at [http://www.sanger.ac.uk/HPG/Chromosome\\_6/contig.html](http://www.sanger.ac.uk/HPG/Chromosome_6/contig.html).

RPL11-507C10 is from the library RPL11-2 constructed by the group of Pielert de Jong. For further details see <http://www.chori.org/gar/pj/rpl11-2.htm>.

This sequence is the entire insert of clone RPL11-507C10 the true right end of clone RPL11-4M1 is at 47323 in this sequence.

Location/Qualifiers  
1..215705  
/organism="Homo sapiens"  
/db\_xref="taxon:9606"  
/chromosome="6"  
/map="q25;2q26"

/clone="RP11-507C10"  
/clone\_id="RPL11-2"  
/note="Single clone region Sequence from reads from a short insert library derived from a single PUC clone."  
/restriction\_digest="data contained in the assembly"  
miss\_feature  
156422..156454  
/note="Sequence from uni-directional primer reads only."  
unseq  
156427

BASE COUNT 57297 a 50288 c 49124 g 59032 t

ORIGIN

misc\_feature

Source

FEATURES

source

JOURNAL

RETRIEVE 2 bases 1 to 478

AUTHORS Fadiel,A., Chen,Z.C. and Nattolin,F.

LITTLE Direct Submission

JOURNAL Submitted (23-SEP-1996) M3SYN, Yale University, 333 Cedar street,

New Haven, CT 06520, USA

FEATURES location/Qualifiers

1..478

/organism="Homo sapiens"

/db\_xref="taxon:9606"

/chromosome="6"

/map="6q22;q27.6"

/protein\_id="AAU01156.1"

/product="Erchin"

/db\_xref="GI:6063147"

/translation="GMYGINVEIKKNGTDLWLYVALGLNIYKEKKDKLAKPICKPP

WESEINISNDKKEVTKPDKKAPDFVYAPRLPKNGTDLWLYVALGLNIYKEKKDKLAKPICKPP

LEVKOMKAQAREKXQNLERQOLETERKRKEVVEREKELEMLRQLQYED"

BASE COUNT 154 a 154 c 136 g 93 t 2 others

ORIGIN

Alignment Scores:

Pred. No.: 0.000515

Length: 478

Score: 62.00

Matches: 12

Percent Similarity: 100.00%

Conservative: 1

Best Local Similarity: 94.31\*

Mismatches: 0

Indels: 0

Gaps: 0

DB:

ns-09-856-070-19 (1-13) x AF189213 (1-478)

misc\_feature

Source

FEATURES

source

JOURNAL

RETRIEVE 3 bases 1 to 3057

AUTHORS Fadiel,A., Chen,Z.C. and Nattolin,F.

LITTLE Direct Submission

JOURNAL Submitted (12-JUL-1991) N. Funayama, National Inst. for

PHYSIOLOGICAL SCIENCES, Miyazaki Okazaki 844, JAPAN

FEATURES location/Qualifiers

1..3057

/organism="Homo sapiens"

/db\_xref="taxon:9606"

/chromosome="6"

/map="q25;2q26"

/clone="RP11-507C10"

/clone\_id="RPL11-2"

/note="Single clone region Sequence from reads from a

short insert library derived from a single PUC clone."

/restriction\_digest="data contained in the assembly"

miss\_feature

156422..156454

/note="Sequence from uni-directional primer reads only."

unseq

156427

BASE COUNT 57297 a 50288 c 49124 g 59032 t

ORIGIN

Alignment Scores:

Pred. No.: 0.0002

Length: 215705

Matches: 13

Score: 65.00

Percent Similarity: 100.00%

Best Local Similarity: 100.00\*

Query Match:

DB: 9

DB:

JOURNAL

RETRIEVE 2 bases 1 to 478

AUTHORS Fadiel,A., Chen,Z.C. and Nattolin,F.

LITTLE Direct Submission

JOURNAL Submitted (23-SEP-1996) M3SYN, Yale University, 333 Cedar street,

New Haven, CT 06520, USA

FEATURES location/Qualifiers

1..478

/organism="Homo sapiens"

/db\_xref="taxon:9606"

/chromosome="6"

/map="6q22;q27.6"

/protein\_id="AAU01156.1"

/product="Erchin"

/translation="GMYGINVEIKKNGTDLWLYVALGLNIYKEKKDKLAKPICKPP

WESEINISNDKKEVTKPDKKAPDFVYAPRLPKNGTDLWLYVALGLNIYKEKKDKLAKPICKPP

LEVKOMKAQAREKXQNLERQOLETERKRKEVVEREKELEMLRQLQYED"

BASE COUNT 154 a 154 c 136 g 93 t 2 others

ORIGIN

Alignment Scores:

Pred. No.: 0.000515

Length: 478

Score: 62.00

Matches: 12

Percent Similarity: 100.00%

Conservative: 1

Best Local Similarity: 94.31\*

Mismatches: 0

Indels: 0

Gaps: 0

DB:

JOURNAL

RETRIEVE 2 bases 1 to 478

AUTHORS Fadiel,A., Chen,Z.C. and Nattolin,F.

LITTLE Direct Submission

JOURNAL Submitted (23-SEP-1996) M3SYN, Yale University, 333 Cedar street,

New Haven, CT 06520, USA

FEATURES location/Qualifiers

1..478

/organism="Homo sapiens"

/db\_xref="taxon:9606"

/chromosome="6"

/map="6q22;q27.6"

/protein\_id="AAU01156.1"

/product="Erchin"

/translation="GMYGINVEIKKNGTDLWLYVALGLNIYKEKKDKLAKPICKPP

WESEINISNDKKEVTKPDKKAPDFVYAPRLPKNGTDLWLYVALGLNIYKEKKDKLAKPICKPP

LEVKOMKAQAREKXQNLERQOLETERKRKEVVEREKELEMLRQLQYED"

BASE COUNT 154 a 154 c 136 g 93 t 2 others

ORIGIN

Alignment Scores:

Pred. No.: 0.000515

Length: 478

Score: 62.00

Matches: 12

Percent Similarity: 100.00%

Conservative: 1

Best Local Similarity: 94.31\*

Mismatches: 0

Indels: 0

Gaps: 0

DB:

|                     |                          |  |
|---------------------|--------------------------|--|
| Project Information | Project Name:            | 0  |
| Center              | Clone name:              | Ric1-24_3512   |
| ORGANISM            | Organism:                | Mus musculus   |
| COMMENT             | Comments:                | Genome Center: Genome Institute<br>Center Code: JGI<br>Web site: <a href="http://www.jgi.doe.gov">http://www.jgi.doe.gov</a>   |
| FEATURES            | Source                   | 1 183302<br>Organism: "Mus musculus"<br>/db_xref="taxon:10090"<br>/chromosome="16"<br>/clone="RP23-3512"   |
| BASE COUNT          | Consensus quality:       | 150780 bases at least Q40  |
| ORIGIN              | Consensus quality:       | 150786 bases at least Q30  |
|                     | Consensus quality:       | 150783 bases at least Q20  |
|                     | EST imputed insert size: | 20030; aarose fp estimation  |
| RESULTS             | Summary Statistics       | Summary Statistics<br>Consensus quality: 150780 bases at least Q40<br>Consensus quality: 150786 bases at least Q30<br>Consensus quality: 150783 bases at least Q20<br>EST imputed insert size: 20030; aarose fp estimation |
| DEFINITION          | Project Name:            | DOE Joint Genome Institute   |
| ACCESSION           | Journal:                 | Submitted (15-JAN-2001) Production Sequencing Facility, DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA   |
| KEYWORDS            | Authors:                 | 1 (bases 1 to 183302)<br>DOE Joint Genome Institute<br>Sequencing of human chromosome 16<br>Unpublished  |
| SOURCE              | Title:                   | JOURNAL<br>2 (bases 1 to 183302)<br>DOE Joint Genome Institute   |
| ORGANISM            | REFERENCE                | Reference<br>Mammalia; Eutheria; Rodentia; Sciurognathii; Muridae; Murinae; Mus; Mus musculus  |
|                     | AUTHORS                  | Authors<br>DOE Joint Genome Institute  |
|                     | JOURNAL                  | Journal<br>Submitted (15-JAN-2001) Production Sequencing Facility, DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA  |
|                     | COMMENT                  | Comments<br>Genome Center<br>Center Code: JGI<br>Web site: <a href="http://www.jgi.doe.gov">http://www.jgi.doe.gov</a>   |
| RESULTS             | Project Information      | Project Information<br>Center  |
| DEFINITION          | Clone name:              | Ric1-24_3512   |
| ACCESSION           | Organism:                | Mus musculus   |
| KEYWORDS            | Chromosome:              | 16   |
| SOURCE              | Clone:                   | RP23-3512  |
| ORGANISM            | Base Count:              | 47411  |
|                     | Origin:                  | 42561 a 43483 a 46238 1 4299 others  |
|                     | Alignment Scores:        |  |

Estimated insert size: 180802; sum-of-contigs estimation  
 Quality coverage: 02 in 020 bases; sum-of-contigs estimation.  
 \* NOTE: This is a 'working draft' sequence. It currently  
 \* consists of 26 contigs. The true order of the pieces  
 \* is not known and their order in this sequence record is  
 \* arbitrary. Gaps between the contigs are represented as  
 \* runs of N, but the exact sites of the gaps are unknown.  
 \* This record will be updated with the finished sequence  
 \* as soon as it is available and the accession number will  
 \* be preserved.

1 1180: contig of 1180 bp in length  
 \* 1181 1280: gap of unknown length  
 \* 1181 1280: gap of unknown length  
 \* 1231: contig of 1151 bp in length  
 \* 2432 2532: contig of 1184 bp in length  
 \* 3716 3815: gap of unknown length  
 \* 5031: contig of 1216 bp in length  
 \* 5131: gap of unknown length  
 \* 5286: contig of 1155 bp in length  
 \* 6686: contig of unknown length  
 \* 6687 7849: contig of 1163 bp in length  
 \* 7850 7949: gap of unknown length  
 \* 9882: contig of 1833 bp in length  
 \* 9883 11902: gap of unknown length  
 \* 11902: contig of 1920 bp in length  
 \* 11903 11924: contig of 1022 bp in length  
 \* 12325 12324: gap of unknown length  
 \* 13025 15074: contig of 2050 bp in length  
 \* 13075 17413: gap of unknown length  
 \* 13075 17413: contig of 2339 bp in length  
 \* 1414 17513: gap of unknown length  
 \* 17514 20075: contig of 2562 bp in length  
 \* 20076 20175: gap of unknown length  
 \* 20176 22035: contig of 1860 bp in length  
 \* 22036 22135: gap of unknown length  
 \* 22136 24443: contig of 2308 bp in length  
 \* 24444 24543: gap of unknown length  
 \* 24544 28186: contig of 3643 bp in length  
 \* 28187 30176: gap of unknown length  
 \* 30176 32187: gap of unknown length  
 \* 32187 36690: gap of unknown length  
 \* 36690 36891: gap of unknown length  
 \* 36891 42136: contig of 5781 bp in length  
 \* 42136 42443: gap of unknown length  
 \* 42444 42572: gap of unknown length  
 \* 42572 50743: contig of 7872 bp in length  
 \* 50744 50843: gap of unknown length  
 \* 50844 58333: contig of 7490 bp in length  
 \* 58334 58433: gap of unknown length  
 \* 58433 86084: gap of unknown length  
 \* 86084 86685: contig of 15512 bp in length  
 \* 86685 101596: contig of 8109 bp in length  
 \* 101596 101696: gap of unknown length  
 \* 101696 126085: contig of 24489 bp in length  
 \* 126085 126186: gap of unknown length  
 \* 126186 142027: contig of 15842 bp in length  
 \* 142027 142127: gap of unknown length  
 \* 142127 183302: contig of 41175 bp in length.  
 Location/Qualifiers

|   |  |   |                                      |                                       |
|---|--|---|--------------------------------------|---------------------------------------|
| Prod. No.:  | 0.292  | Length:   | 183152                               | gap of unknown length                 |
| Score:  | 62,60  | Matches:  | 12                                   | contig of 1,5875 bp in length         |
| Percent Similarity:   | 100.00%  | Conservative:   | 1                                    | 25,263                                |
| Best Local Similarity:  | 92.31%   | Mismatches:   | 0                                    | 25,233                                |
| Query Match:  | 25,308   | Indices:  | 0                                    | 35,874                                |
| DUB #:  | 2  | Gaps:   | 0                                    | 35,875: contig of 10,563 bp in length |
| RESULTS   | 1  | ACUS-09-856-070-19 (1-13) x ACUS-09-856-070-19 (1-183301) | AC074334/C                           | 35,876: gap of unknown length         |
| DEFINITION  | MUS musculus chromosome 15 clone RP23-1011n strain C57BL6/J, linear  | ITG 15-MAY-2002   | 35,877: gap of unknown length        |                                       |
| WORKING DRAFT   | SF2014NFC, 50 unordered pieces.  | ITG 15-MAY-2002   | 45,144: gap of unknown length        |                                       |
| ACCESSION   | AC074334   | ITGS_DRAFT.   | 45,145: contig of 9,518 bp in length |                                       |
| VERSION   | AC074334_5   | ITGS_PHASE1.  | 45,146: contig of 8,681 bp in length |                                       |
| KEYWORDS  | HGT; ITGS; PHASE1;   | ITGS_DRAFT.   | 54,135: gap of unknown length        |                                       |
| SOURCE  | MUS musculus   | ITGS_DRAFT.   | 63,271: contig of 35,92 bp in length |                                       |
| ORGANISM  | MUS musculus   | ITGS_DRAFT.   | 63,272: gap of unknown length        |                                       |
| JOURNAL   | Unpublished Mouse Sequencing   | ITGS_DRAFT.   | 63,273: contig of 3,571 bp in length |                                       |
| REFERENCE   | 1 (bases 1 to 207782)  | ITGS_DRAFT.   | 73,318: gap of unknown length        |                                       |
| AUTHORS   | Han,J., Montgomery,K.T., Grills,G., Lee,E., Long,J., Pomerantz,R., Ioshikhes,I.P., Shim,C., Becker,T., Thomas,E., Perera,A., Gordon,M., Goltz,T.S. and Kucherlapati,R. | ITGS_DRAFT.   | 73,319: gap of unknown length        |                                       |
| TITLE   | High throughput Mouse sequencing   | ITGS_DRAFT.   | 73,320: gap of unknown length        |                                       |
| JOURNAL   | Unpublished (bases 1 to 207782)  | ITGS_DRAFT.   | 73,321: gap of unknown length        |                                       |
| REFERENCE   | 2 (bases 1 to 207782)  | ITGS_DRAFT.   | 73,322: gap of unknown length        |                                       |
| AUTHORS   | Han,J., Montgomery,K.T., Grills,G., Lee,E., Long,J., Pomerantz,R., Ioshikhes,I.P., Shim,C., Becker,T., Thomas,E., Perera,A., Gordon,M., Goltz,T.S. and Kucherlapati,R. | ITGS_DRAFT.   | 73,323: gap of unknown length        |                                       |
| TITLE   | Direct Submission  | ITGS_DRAFT.   | 73,324: gap of unknown length        |                                       |
| JOURNAL   | Submitted (28 JUL 2000) Department of Molecular Genetics, Albert Einstein College of Medicine Genome Center, 1300 Morris Park Ave., Bronx, NY 10461, USA               | ITGS_DRAFT.   | 73,325: gap of unknown length        |                                       |
| REFERENCE   | 3 (bases 1 to 207782)  | ITGS_DRAFT.   | 73,326: gap of unknown length        |                                       |
| AUTHORS   | Han,J., Montgomery,K.T., Padigaru,M., Grills,G., Lee,E., Long,J., Ioshikhes,I.P. and Kucherlapati,R.   | ITGS_DRAFT.   | 73,327: gap of unknown length        |                                       |
| TITLE   | Direct Submission  | ITGS_DRAFT.   | 73,328: gap of unknown length        |                                       |
| JOURNAL   | Submitted (14 DEC 2001) Harvard Partners Center for Genetics and Genomics, Harvard Medical School, 65 Landsdowne St., Cambridge, MA 02139, USA                         | ITGS_DRAFT.   | 73,329: gap of unknown length        |                                       |
| COMMENT   | On Oct 29, 2009 this sequence version replaced q1:10799310.  | ITGS_DRAFT.   | 73,330: gap of unknown length        |                                       |
| Center  | Harvard Partners Genome Center   | ITGS_DRAFT.   | 73,331: gap of unknown length        |                                       |
| Code:   | HPGC   | ITGS_DRAFT.   | 73,332: gap of unknown length        |                                       |
| Web site:   | <a href="http://www.hpcg.org/sequence/mouse.html">http://www.hpcg.org/sequence/mouse.html</a>  | ITGS_DRAFT.   | 73,333: gap of unknown length        |                                       |
| Contact:  | <a href="mailto:hpcgmed1.mgh.harvard.edu">hpcgmed1.mgh.harvard.edu</a>   | ITGS_DRAFT.   | 73,334: gap of unknown length        |                                       |
| -----Summary Statistics-----  |  | ITGS_DRAFT.   | 73,335: gap of unknown length        |                                       |
| Center project name:  | AFD  | ITGS_DRAFT.   | 73,336: gap of unknown length        |                                       |
| Sequencing vector:  | pUC18; L08752  | ITGS_DRAFT.   | 73,337: gap of unknown length        |                                       |
| Chemistry:  | Dye-terminator Big Dye; 100%   | ITGS_DRAFT.   | 73,338: gap of unknown length        |                                       |
| * Consensus quality:  | 185594 at least Q20  | ITGS_DRAFT.   | 73,339: gap of unknown length        |                                       |
| * Consensus quality:  | 177266 at least Q30  | ITGS_DRAFT.   | 73,340: gap of unknown length        |                                       |
| * Consensus quality:  | 164948 at least Q40  | ITGS_DRAFT.   | 73,341: gap of unknown length        |                                       |
| Estimated insert size:  | agarsose-FP - N/A  | ITGS_DRAFT.   | 73,342: gap of unknown length        |                                       |
| **Estimated insert size:  | 206802 - sum-of-contigs  | ITGS_DRAFT.   | 73,343: gap of unknown length        |                                       |
| Quality coverage:   | 4.8x sum-of-contigs - N/A  | ITGS_DRAFT.   | 73,344: gap of unknown length        |                                       |
| ** NOTE: This is a 'working draft' sequence. It currently consists of 50 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Caps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved. | 11368: contig of 11366 bp in length  | 11369: contig of 25,26 bp in length                       |                                      |                                       |
|   |  | 11370: contig of 18,225 bp in length                      | 11371: contig of 18,225 bp in length |                                       |
|   |  | 11372: contig of 18,225 bp in length                      | 11373: contig of 18,225 bp in length |                                       |
|   |  | 11374: contig of 18,225 bp in length                      | 11375: contig of 18,225 bp in length |                                       |
|   |  | 11376: contig of 18,225 bp in length                      | 11377: contig of 18,225 bp in length |                                       |
|   |  | 11378: contig of 18,225 bp in length                      | 11379: contig of 18,225 bp in length |                                       |
|   |  | 11380: contig of 18,225 bp in length                      | 11381: contig of 18,225 bp in length |                                       |
|   |  | 11382: contig of 18,225 bp in length                      | 11383: contig of 18,225 bp in length |                                       |
|   |  | 11384: contig of 18,225 bp in length                      | 11385: contig of 18,225 bp in length |                                       |
|   |  | 11386: contig of 18,225 bp in length                      | 11387: contig of 18,225 bp in length |                                       |
|   |  | 11388: contig of 18,225 bp in length                      | 11389: contig of 18,225 bp in length |                                       |
|   |  | 11390: contig of 18,225 bp in length                      | 11391: contig of 18,225 bp in length |                                       |
|   |  | 11392: contig of 18,225 bp in length                      | 11393: contig of 18,225 bp in length |                                       |
|   |  | 11394: contig of 18,225 bp in length                      | 11395: contig of 18,225 bp in length |                                       |
|   |  | 11396: contig of 18,225 bp in length                      | 11397: contig of 18,225 bp in length |                                       |
|   |  | 11398: contig of 18,225 bp in length                      | 11399: contig of 18,225 bp in length |                                       |
|   |  | 11400: contig of 18,225 bp in length                      | 11401: contig of 18,225 bp in length |                                       |
|   |  | 11402: contig of 18,225 bp in length                      | 11403: contig of 18,225 bp in length |                                       |
|   |  | 11404: contig of 18,225 bp in length                      | 11405: contig of 18,225 bp in length |                                       |
|   |  | 11406: contig of 18,225 bp in length                      | 11407: contig of 18,225 bp in length |                                       |
|   |  | 11408: contig of 18,225 bp in length                      | 11409: contig of 18,225 bp in length |                                       |
|   |  | 11410: contig of 18,225 bp in length                      | 11411: contig of 18,225 bp in length |                                       |
|   |  | 11412: contig of 18,225 bp in length                      | 11413: contig of 18,225 bp in length |                                       |
|   |  | 11414: contig of 18,225 bp in length                      | 11415: contig of 18,225 bp in length |                                       |
|   |  | 11416: contig of 18,225 bp in length                      | 11417: contig of 18,225 bp in length |                                       |
|   |  | 11418: contig of 18,225 bp in length                      | 11419: contig of 18,225 bp in length |                                       |
|   |  | 11420: contig of 18,225 bp in length                      | 11421: contig of 18,225 bp in length |                                       |
|   |  | 11422: contig of 18,225 bp in length                      | 11423: contig of 18,225 bp in length |                                       |
|   |  | 11424: contig of 18,225 bp in length                      | 11425: contig of 18,225 bp in length |                                       |
|   |  | 11426: contig of 18,225 bp in length                      | 11427: contig of 18,225 bp in length |                                       |
|   |  | 11428: contig of 18,225 bp in length                      | 11429: contig of 18,225 bp in length |                                       |
|   |  | 11430: contig of 18,225 bp in length                      | 11431: contig of 18,225 bp in length |                                       |
|   |  | 11432: contig of 18,225 bp in length                      | 11433: contig of 18,225 bp in length |                                       |
|   |  | 11434: contig of 18,225 bp in length                      | 11435: contig of 18,225 bp in length |                                       |
|   |  | 11436: contig of 18,225 bp in length                      | 11437: contig of 18,225 bp in length |                                       |
|   |  | 11438: contig of 18,225 bp in length                      | 11439: contig of 18,225 bp in length |                                       |
|   |  | 11440: contig of 18,225 bp in length                      | 11441: contig of 18,225 bp in length |                                       |
|   |  | 11442: contig of 18,225 bp in length                      | 11443: contig of 18,225 bp in length |                                       |
|   |  | 11444: contig of 18,225 bp in length                      | 11445: contig of 18,225 bp in length |                                       |
|   |  | 11446: contig of 18,225 bp in length                      | 11447: contig of 18,225 bp in length |                                       |
|   |  | 11448: contig of 18,225 bp in length                      | 11449: contig of 18,225 bp in length |                                       |
|   |  | 11450: contig of 18,225 bp in length                      | 11451: contig of 18,225 bp in length |                                       |
|   |  | 11452: contig of 18,225 bp in length                      | 11453: contig of 18,225 bp in length |                                       |
|   |  | 11454: contig of 18,225 bp in length                      | 11455: contig of 18,225 bp in length |                                       |
|   |  | 11456: contig of 18,225 bp in length                      | 11457: contig of 18,225 bp in length |                                       |
|   |  | 11458: contig of 18,225 bp in length                      | 11459: contig of 18,225 bp in length |                                       |
|   |  | 11460: contig of 18,225 bp in length                      | 11461: contig of 18,225 bp in length |                                       |
|   |  | 11462: contig of 18,225 bp in length                      | 11463: contig of 18,225 bp in length |                                       |
|   |  | 11464: contig of 18,225 bp in length                      | 11465: contig of 18,225 bp in length |                                       |
|   |  | 11466: contig of 18,225 bp in length                      | 11467: contig of 18,225 bp in length |                                       |
|   |  | 11468: contig of 18,225 bp in length                      | 11469: contig of 18,225 bp in length |                                       |
|   |  | 11470: contig of 18,225 bp in length                      | 11471: contig of 18,225 bp in length |                                       |
|   |  | 11472: contig of 18,225 bp in length                      | 11473: contig of 18,225 bp in length |                                       |
|   |  | 11474: contig of 18,225 bp in length                      | 11475: contig of 18,225 bp in length |                                       |
|   |  | 11476: contig of 18,225 bp in length                      | 11477: contig of 18,225 bp in length |                                       |
|   |  | 11478: contig of 18,225 bp in length                      | 11479: contig of 18,225 bp in length |                                       |
|   |  | 11480: contig of 18,225 bp in length                      | 11481: contig of 18,225 bp in length |                                       |
|   |  | 11482: contig of 18,225 bp in length                      | 11483: contig of 18,225 bp in length |                                       |
|   |  | 11484: contig of 18,225 bp in length                      | 11485: contig of 18,225 bp in length |                                       |
|   |  | 11486: contig of 18,225 bp in length                      | 11487: contig of 18,225 bp in length |                                       |
|   |  | 11488: contig of 18,225 bp in length                      | 11489: contig of 18,225 bp in length |                                       |
|   |  | 11490: contig of 18,225 bp in length                      | 11491: contig of 18,225 bp in length |                                       |
|   |  | 11492: contig of 18,225 bp in length                      | 11493: contig of 18,225 bp in length |                                       |
|   |  | 11494: contig of 18,225 bp in length                      | 11495: contig of 18,225 bp in length |                                       |
|   |  | 11496: contig of 18,225 bp in length                      | 11497: contig of 18,225 bp in length |                                       |
|   |  | 11498: contig of 18,225 bp in length                      | 11499: contig of 18,225 bp in length |                                       |
|   |  | 11500: contig of 18,225 bp in length                      | 11501: contig of 18,225 bp in length |                                       |
|   |  | 11502: contig of 18,225 bp in length                      | 11503: contig of 18,225 bp in length |                                       |
|   |  | 11504: contig of 18,225 bp in length                      | 11505: contig of 18,225 bp in length |                                       |
|   |  | 11506: contig of 18,225 bp in length                      | 11507: contig of 18,225 bp in length |                                       |
|   |  | 11508: contig of 18,225 bp in length                      | 11509: contig of 18,225 bp in length |                                       |
|   |  | 11510: contig of 18,225 bp in length                      | 11511: contig of 18,225 bp in length |                                       |
|   |  | 11512: contig of 18,225 bp in length                      | 11513: contig of 18,225 bp in length |                                       |
|   |  | 11514: contig of 18,225 bp in length                      | 11515: contig of 18,225 bp in length |                                       |
|   |  | 11516: contig of 18,225 bp in length                      | 11517: contig of 18,225 bp in length |                                       |
|   |  | 11518: contig of 18,225 bp in length                      | 11519: contig of 18,225 bp in length |                                       |
|   |  | 11520: contig of 18,225 bp in length                      | 11521: contig of 18,225 bp in length |                                       |
|   |  | 11522: contig of 18,225 bp in length                      | 11523: contig of 18,225 bp in length |                                       |
|   |  | 11524: contig of 18,225 bp in length                      | 11525: contig of 18,225 bp in length |                                       |
|   |  | 11526: contig of 18,225 bp in length                      | 11527: contig of 18,225 bp in length |                                       |
|   |  | 11528: contig of 18,225 bp in length                      | 11529: contig of 18,225 bp in length |                                       |
|   |  | 11530: contig of 18,225 bp in length                      | 11531: contig of 18,225 bp in length |                                       |
|   |  | 11532: contig of 18,225 bp in length                      | 11533: contig of 18,225 bp in length |                                       |
|   |  | 11534: contig of 18,225 bp in length                      | 11535: contig of 18,225 bp in length |                                       |
|   |  | 11536: contig of 18,225 bp in length                      | 11537: contig of 18,225 bp in length |                                       |
|   |  | 11538: contig of 18,225 bp in length                      | 11539: contig of 18,225 bp in length |                                       |
|   |  | 11540: contig of 18,225 bp in length                      | 11541: contig of 18,225 bp in length |                                       |
|   |  | 11542: contig of 18,225 bp in length                      | 11543: contig of 18,225 bp in length |                                       |
|   |  | 11544: contig of 18,225 bp in length                      | 11545: contig of 18,225 bp in length |                                       |
|   |  | 11546: contig of 18,225 bp in length                      | 11547: contig of 18,225 bp in length |                                       |
|   |  | 11548: contig of 18,225 bp in length                      | 11549: contig of 18,225 bp in length |                                       |
|   |  | 11550: contig of 18,225 bp in length                      | 11551: contig of 18,225 bp in length |                                       |
|   |  | 11552: contig of 18,225 bp in length                      | 11553: contig of 18,225 bp in length |                                       |
|   |  | 11554: contig of 18,225 bp in length                      | 11555: contig of 18,225 bp in length |                                       |
|   |  | 11556: contig of 18,225 bp in length                      | 11557: contig of 18,225 bp in length |                                       |
|   |  | 11558: contig of 18,225 bp in length                      | 11559: contig of 18,225 bp in length |                                       |
|   |  | 11560: contig of 18,225 bp in length                      | 11561: contig of 18,225 bp in length |                                       |
|   |  | 11562: contig of 18,225 bp in length                      | 11563: contig of 18,225 bp in length |                                       |
|   |  | 11564: contig of 18,225 bp in length                      | 11565: contig of 18,225 bp in length |                                       |
|   |  | 11566: contig of 18,225 bp in length                      | 11567: contig of 18,225 bp in length |                                       |
|   |  | 11568: contig of 18,225 bp in length                      | 11569: contig of 18,225 bp in length |                                       |
|   |  | 11570: contig of 18,225 bp in length                      | 11571: contig of 18,225 bp in length |                                       |
|   |  | 11572: contig of 18,225 bp in length                      | 11573: contig of 18,225 bp in length |                                       |
|   |  | 11574: contig of 18,225 bp in length                      | 11575: contig of 18,225 bp in length |                                       |
|   |  | 11576: contig of 18,225 bp in length                      | 11577: contig of 18,225 bp in length |                                       |
|   |  | 11578: contig of 18,225 bp in length                      | 11579: contig of 18,225 bp in length |                                       |
|   |  | 11580: contig of 18,225 bp in length                      | 11581: contig of 18,225 bp in length |                                       |
|   |  | 11582: contig of 18,225 bp in length                      | 11583: contig of 18,225 bp in length |                                       |
|   |  | 11584: contig of 18,225 bp in length                      | 11585: contig of 18,225 bp in length |                                       |
|   |  | 11586: contig of 18,225 bp in length                      | 11587: contig of 18,225 bp in length |                                       |
|   |  | 11588: contig of 18,225 bp in length                      | 11589: contig of 18,225 bp in length |                                       |
|   |  | 11590: contig of 18,225 bp in length                      | 11591: contig of 18,225 bp in length |                                       |
|   |  | 11592: contig of 18,225 bp in length                      | 11593: contig of 18,225 bp in length |                                       |
|   |  | 11594: contig of 18,225 bp in length                      | 11595: contig of 18,225 bp in length |                                       |
|   |  | 11596: contig of 18,225 bp in length                      | 11597: contig of 18,225 bp in length |                                       |
|   |  | 11598: contig of 18,225 bp in length                      | 11599: contig of 18,225 bp in length |                                       |
|   |  | 11600: contig of 18,225 bp in length                      | 11601: contig of 18,225 bp in length |                                       |
|   |  | 11602: contig of 18,225 bp in length                      | 11603: contig of 18,225 bp in length |                                       |
|   |  | 11604: contig of 18,225 bp in length                      | 11605: contig of 18,225 bp in length |                                       |
|   |  | 11606: contig of 18,225 bp in length                      | 11607: contig of 18,225 bp in length |                                       |
|   |  | 11608: contig of 18,225 bp in length                      | 11609: contig of 18,225 bp in length |                                       |
|   |  | 11610: contig of 18,225 bp in length                      | 11611: contig of 18,225 bp in length |                                       |
|   |  | 11612: contig of 18,225 bp in length                      | 11613: contig of 18,225 bp in length |                                       |
|   |  | 11614: contig of 18,225 bp in length                      | 11615: contig of 18,225 bp in length |                                       |
|   |  | 11616: contig of 18,225 bp in length                      | 11617: contig of 18,225 bp in length |                                       |
|   |  | 11618: contig of 18,225 bp in length                      | 11619: contig of 18,225 bp in length |                                       |
|   |  | 11620: contig of 18,225 bp in length                      | 11621: contig of 18,225 bp in length |                                       |
|   |  | 11622: contig of 18,225 bp in length                      | 11623: contig of 18,225 bp in length |                                       |
|   |  | 11624: contig of 18,225 bp in length                      | 11625: contig of 18,225 bp in length |                                       |
|   |  | 11626: contig of 18,225 bp in length                      | 11627: contig of 18,225 bp in length |                                       |
|   |  | 11628: contig of 18,225 bp in length                      | 11629: contig of 18,225 bp in length |                                       |
|   |  | 11630: contig of 18,225 bp in length                      | 11631: contig of 18,225 bp in length |                                       |
|   |  | 11632: contig of 18,225 bp in length                      | 11633: contig of 18,225 bp in length |                                       |
|   |  | 11634: contig of 18,225 bp in length                      | 11635: contig of 18,225 bp in length |                                       |
|   |  | 11636: contig of 18,225 bp in length                      | 11637: contig of 18,225 bp in length |                                       |
|   |  | 11638: contig of 18,225 bp in length                      | 11639: contig of 18,225 bp in length |                                       |
|   |  | 11640: contig of 18,225 bp in length                      | 11641: contig of 18,225 bp in length |                                       |
|   |  | 11642: contig of 18,225 bp in length                      | 11643: contig of 18,225 bp in length |                                       |
|   |  | 11644: contig of 18,225 bp in length                      | 11645: contig of 18,225 bp in length |                                       |
|   |  | 11646: contig of 18,225 bp in length                      | 11647: contig of 18,225 bp in length |                                       |
|   |  | 11648: contig of 18,225 bp in length                      | 11649: contig of 18,225 bp in length |                                       |
|   |  | 11650: contig of 18,225 bp in length                      | 11651: contig of 18,225 bp in length |                                       |
|   |  | 11652: contig of 18,225 bp in length                      | 11653: contig of 18,225 bp in length |                                       |
|   |  | 11654: contig of 18,225 bp in length                      | 11655: contig of 18,225 bp in length |                                       |
|   |  | 11656: contig of 18,225 bp in length                      | 11657: contig of 18,225 bp in length |                                       |
|   |  | 11658: contig of 18,225 bp in length                      | 11659: contig of 18,225 bp in length |                                       |
|   |  | 11660: contig of 18,225 bp in length                      | 11661: contig of 18,225 bp in length |                                       |
|   |  | 11662: contig of 18,225 bp in length                      | 11663: contig of 18,225 bp in length |                                       |
|   |  | 11664: contig of 18,225 bp in length                      | 11665: contig of 18,225 bp in length |                                       |
|   |  | 11666: contig of 18,225 bp in length                      | 11667: contig of 18,225 bp in length |                                       |
|   |  | 11668: contig of 18,225 bp in length                      | 11669: contig of 18,225 bp in length |                                       |
|   |  | 11670: contig of 18,225 bp in length                      | 11671: contig of 18,225 bp in length |                                       |
|   |  | 11672: contig of 18,225 bp in length                      | 11673: contig of 18,225 bp in length |                                       |
|   |  | 11674: contig of 18,225 bp in length                      | 11675: contig of 18,225 bp in length |                                       |
|   |  | 11676: contig of 18,225 bp in length                      | 11677: contig of 18,225 bp in length |                                       |
|   |  | 11678: contig of 18,225 bp in length                      | 11679: contig of 18,225 bp in length |                                       |
|   |  | 11680: contig of 18,225 bp in length                      | 11681: contig of 18,225 bp in length |                                       |
|   |  | 11682: contig of 18,225 bp in length                      | 11683: contig of 18,225 bp in length |                                       |
|   |  | 11684: contig of 18,225 bp in length                      | 11685: contig of 18,225 bp in length |                                       |
|   |  | 11686: contig of 18,225 bp in length                      | 11687: contig of 18,225 bp in length |                                       |
|   |  | 11688: contig of  |                                      |                                       |

| FEATURES               |        | BASE COUNT          |                             | ORIGIN           |  | ALIGNMENT SCORES:                      |  | SEQUENCE           |  | DEFINITION             |  | ACCESSION  |  | KEYWORDS              |  | RESULT 13               |  | JOURNAL    |  | REFERENCE  |  | TITLE      |  |           |  |
|------------------------|--------|---------------------|-----------------------------|------------------|--|--|--|--------------------|--|------------------------|--|--|--|-----------------------|--|-------------------------|--|------------|--|------------|--|------------|--|-----------|--|
| *                      | 187911 | 190625:             | contig of 2715 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 190626 | 190545:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 190646 | 192089:             | contig of 1443 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 192089 | 192138:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 192109 | 193607:             | contig of 1529 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 193638 | 193658:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 193658 | 195060:             | contig of 1383 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 195061 | 195645:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 195646 | 196365:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 196366 | 198139:             | contig of 1254 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 198139 | 198220:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 198240 | 199307:             | contig of 1668 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 199308 | 199927:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 199927 | 201143:             | contig of 1236 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 201164 | 201183:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 201183 | 202027:             | contig of 84 bp in length   |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 202028 | 202047:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 202048 | 202502:             | contig of 855 bp in length  |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 202503 | 202923:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 202923 | 204159:             | contig of 1228 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 204151 | 204173:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 204171 | 205707:             | contig of 1537 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 205708 | 205727:             | gap of unknown length       |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| *                      | 205728 | 207782:             | contig of 2055 bp in length |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| FEATURES               |        | Location/Qualifiers |                             | 1..297782        |  | /organism="Mus musculus"               |  | /strain="C57BL/6J" |  | /db_xref="taxon:10390" |  | /chromosome="15"   |  | /feature="RPT3-18710" |  | /sex="male"             |  | FEATURES   |  | Source     |  | JOURNAL    |  | REFERENCE |  |
| BASE COUNT             |        | 54791 a             |                             | 49882 .. 49733 y |  | 5..377c +                              |  | 1101 others        |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| ORIGIN                 |        |                     |                             |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| ALIGNMENT SCORES:      |        |                     |                             |                  |  |  |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| pred. No.:             |        | 0..333              |                             | Length:          |  | 207782                                 |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| Score:                 |        | 62.00               |                             | Matches:         |  | 12                                     |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| percent Similarity:    |        | 100.00%             |                             | Conservativity:  |  | 1                                      |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| Best Local Similarity: |        | 92.11%              |                             | MisMatches:      |  | 0                                      |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| Query Match:           |        | 95.38%              |                             | Delets:          |  | 0                                      |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| FB:                    |        | 2                   |                             | Gaps:            |  | 0                                      |  |                    |  |                        |  |  |  |                       |  |                         |  |            |  |            |  |            |  |           |  |
| SEQUENCE               |        | 1..297782           |                             | /                |  | LYSGLGluLeuMetLeuArgLeuGlnAspTyrGluIle |  | 1..11              |  | MUS MUSCULUS           |  | Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus. |  | AC022329              |  | HUGS_PHASE1; HUGS_DRAFT |  | Locus      |  | AC022329/c |  | DEFINITION |  | ORGANISM  |  |
| SEQUENCE               |        | 1..297782           |                             | /                |  | DNA                                    |  | 217917 bp          |  | Linear                 |  | HGC 15-MAY-2002  |  | MUS MUSCULUS          |  | Mus musculus            |  | CONTIGUITY |  | REFERENCE  |  | AUTHORS    |  |           |  |
| SEQUENCE               |        | 1..297782           |                             | /                |  | DNA                                    |  | 217917 bp          |  | Linear                 |  | HGC 15-MAY-2002  |  | Mus musculus          |  | Mus musculus            |  | CONTIGUITY |  | REFERENCE  |  | AUTHORS    |  |           |  |
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| SEQUENCE               |        | 1..297782           |                             | /                |  | DNA                                    |  | 217917 bp          |  | Linear                 |  | HGC 15-MAY-2002  |  | Mus musculus          |  | Mus musculus            |  | CONTIGUITY |  | REFERENCE  |  | AUTHORS    |  |           |  |
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VERSION AF188897.1 GI:6063144  
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 SOURCE Homo sapiens  
 ORGANISM Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Eukaryota; Metazoa; Primates; Catarrhini; Homidae; Homo.  
 REFERENCE 1 (bases 1 to 475)  
 AUTHORS Chen, Z.C., Padiel,A. and Natolin,F.  
 TITLE Ezrin gene mutation in ovarian cancer  
 JOURNAL Unpublished  
 JOURNAL 2 (bases 1 to 475)  
 AUTHORS Chen,Z.C., Padiel,A. and Natolin,F.  
 TITLE Direct Submission  
 SUBMITTED (22-SEP-1993) b/GYN, Yale University, 333 Cedar Street,  
 New Haven, CT 06511, USA  
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 BASE COUNT 154 a 90 c 136 q 93 t 2 others  
 ORIGIN

## Alignment Scores:

|                        |         |               |     |
|------------------------|---------|---------------|-----|
| pred. No.:             | 0.00136 | Length:       | 475 |
| Score:                 | 60.00   | Matches:      | 12  |
| Percent Similarity:    | 100.0%  | Conservative: | 0   |
| Best Local Similarity: | 100.0%  | Mismatches:   | 0   |
| Query Match:           | 92.31%  | Indels:       | 0   |
| DB:                    | 9       | Gaps:         | 0   |

OS-09-856-070-19 (1-13) x AF188897 (1-475)

QY 1 YSGCNGluteametLeuGluGlnAsp<sup>y</sup>Yglu 12  
 DB 440 NGAGAGATTTGATGCTGGCTTGAGCATGAA 475

Search completed: January 16, 2003, 19:03:44

Job time : 1208.56 secs